

**ORAL HISTORY—  
CHARLES D. JONES**

**This is an interview conducted on March 27, 1997 with 34-year Census Bureau veteran and former Associate Director for the Decennial Census, Charles D. Jones [Associate Director for Decennial Censuses, 1987 to 1994]. The interviewers are David M. Pemberton, Decennial Census Historian, and Michael L. Hovland, Economic Census Historian.**

**Pemberton: Would you begin by telling us a little bit about your background—where you were born, where you went to school, and how you got from West Virginia to Suitland, Maryland?**

**Jones:** I was born in June 1934 in a little place called Crum, West Virginia. I was one of 10 children. I went to school in West Virginia until we moved to Columbus, Ohio during my senior year. I graduated from high school in 1952 in Columbus, Ohio. I worked for a while prior to going to college in 1956. I graduated from Moorehead State University in 1960, with a double major in Mathematics and Chemistry and a minor in Physics. I did a little “hitch” in the Army and then started working part-time while going to graduate school at Ohio State University. Friends of mine who were working at the Census Bureau told me that the Bureau needed statisticians and indicated that I could come here and continue my education at the Bureau’s expense if I took courses consistent with the agency’s mission. I interviewed at the Bureau and got a job. Back in the early 1960s, there were few people with statistical training—especially in the area of survey work. Since there were only a few places turning out statisticians, there was a real dearth of mathematical statisticians at that time. So, I came to work in the Statistical Methods Division and continued taking statistics courses at American University. I completed the course work for a Master’s Degree, but did not actually receive the diploma.

**Pemberton: Were there courses in such things as survey design at that point?**

**Jones:** Only at the U.S. Department of Agriculture’s Graduate School<sup>1</sup>, now Grad in Washington, D.C. Joe [Joseph] Waksberg [Associate Director for Research and Development] and Joe [Joseph] Steinberg [Chief, Statistical Methods Division, 1960 census] taught that course out of the book written by [Morris H.] Hansen [Associate Director for Statistical Standards and Methodology], [William N.] Hurwitz [Chief, Statistical Research Section], and [William G.] Madow [Assistant to the Mathematical Advisor].<sup>2</sup> Joe Steinberg was my first division chief in the Statistical Methods Division. He was teaching the course and I took the course there.

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<sup>1</sup> Graduate School, USDA, now Graduate School USA

<sup>2</sup> *Sample Survey Methods and Theory, Volumes I and II*

**Pemberton:** **It never hurts to show the boss you have initiative.**

**Jones:** It was also necessary. The Statistical Methods Division specialized in this work, therefore, in order to succeed there, you needed that training. So, from 1962 to 1994, I worked at different places within the Census Bureau.

**Pemberton:** **Did you start out in the Survey Design Branch of the Statistical Methods Division?**

**Jones:** Yes.

**Pemberton:** **Was Walter [M.] Perkins [Chief, Survey Design Branch] the branch chief at that point?**

**Jones:** Yes he was.

**Pemberton:** **Was he the one that interviewed and hired you?**

**Jones:** Actually Jean Smith from the Personnel Division came to Ohio State to interview me. I also sent my resume to the Statistical Methods Division. The Statistical Methods Division hired me based on Jean Smith's interview and my resume. I worked for Walter Perkins for several years until he retired. When I arrived at the Census Bureau, my division chief was Joe Steinberg. He was division chief for about 1 year prior to Joe Waksberg taking the position. I worked directly with Walter Perkins and Joe Waksberg for several years.

**Pemberton:** **What kind of projects did you work on?**

**Jones:** The first job I had at the Census Bureau was to try to measure undercount in what was called a "reverse record check." This was an experimental attempt at trying to set up panels, sample from them, and follow these over a 10-year period to see if households within the sample would be counted in the next census. A big problem was that during those ten years, you would lose track of people and you couldn't count them. It turned out not to be feasible. Today, with new ways of keeping track of people, this project may be possible. The advantage of this project is that it provides independence from the current census, which would be worthwhile in the estimation.

**Pemberton:** **Your frame then would have been the earlier census.**

**Jones:** You take the 1950 census, a sample of people who were missed in the 1950 census, a sample of people born between 1950 and 1960, and a sample of people who immigrated to the United States from the Immigration and Naturalization Records. These samples would cover most of the population. Then, you follow

these people in the sample until the 1960 census. You try to locate these individuals in the census to determine who was counted and who was missed. There is a Census Bureau publication, I think it's ER60 number 2, that explains and gives the results of our 1960 efforts.<sup>3</sup> There were a lot of things we studied. We performed interviews in surveys and tried to determine how these affect the data quality, we looked at different ways of doing reinterview and quality control and estimating responsibilities, and we looked at ways to increase the efficiency of survey operations. I recall during a labor force survey that instead of just asking people about this month, we also could ask them about last month. Doing this could double the amount of data we collected on each interview. This would have a big effect on the reliability of the data. After we researched this, it turned out not to be feasible because unemployment is such a volatile characteristic. People working this month tended to forget that they were unemployed last month. We experimented with the decennial census to find different ways to conduct the listing and the interviews. The "mailout/mailback" census was developed during this period. The first experiment that I recall was in 1961. We also carried out major pre-tests in Louisville, Kentucky in 1964, in Cleveland, Ohio in 1965, and in New Haven, Connecticut. Other tests were conducted where we looked at ways of getting more complete listings in rural areas and to determine what effect paying an hourly rate versus piece rate would have on the complete list. Of course, most of these were rural, small scale tests that didn't affect the ongoing collection of data. I also worked in what was called the Response Variance Studies Branch. We looked at some of the content items of the response variance as well as the accuracy of responses in the Current Population Survey and decennial census. In the Statistical Methods Division, we worked on the censuses and the demographic surveys. We studied methods, data quality issues, costs, and sought better ways to do things.

**Pemberton:** Were you involved in the redesign of CPS after the 1960 Census?

**Jones:** No; I wasn't. The first redesign I was involved with followed the 1980 census. In fact, that redesign was the first full-blown redesign of all the demographic surveys since the mid-1950s. In 1960 and 1970 we updated and reintroduced the new sampling frame but the 1980 census was the first time we tried to design each of the individual surveys rather than having one design fit all. There were different designs for the Current Population Survey, the Health Interview Survey, and one for crime. Although they overlapped, there were some significant differences among them. The 1980 census was the first time we made these changes and it also was the first time we had enough resources. In the 1960s and 1970s we tried to get support from the decennial census to carry out the redesign. In 1980, we made an effort to go to the Office of Management and Budget to ask for an

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<sup>3</sup> *Evaluation and Research Program of the U.S. Censuses of Population and Housing, 1960: Record Check of Studies of Population Coverage.* Series ER60, No. 2. (GPO, Washington, DC), 1964.

initiative that set aside funds allowing us to do the research and the redesign. I think in the 1990 redesign followed that same pattern. In 1980, the big issue was getting the Office of Management and Budget's support for separate funding and getting other agencies to support our request. Once the money issue was settled, we had to research and tailor each of the surveys' designs. I look at that as a significant improvement in that process.

**Pemberton: At what GS-level did you come into the government?**

**Jones:** I came in as a GS-7, at that time they were hiring professionals at a GS-5. If you had a B average or better [in college] they could get you a GS-7. I received a grand salary of \$6345 a year and I was glad to get it.

**Pemberton: If my understanding is correct, you came to the Bureau in January 1962. By March 1968, you were chief of the Survey Design Branch.**

**Jones:** Let's see, that's six years and five promotions.

**Pemberton: Pretty good.**

**Jones:** I think it can happen if you work hard and apply yourself. Also, back in those days, there were few math statisticians. We had to dig hard to get people that were qualified to come to the Census Bureau.

**Pemberton: There probably were not many people who specialized in mathematic statistics.**

**Jones:** I think there were a lot of mathematical statisticians, but they were mainly going the "academic trail." There weren't that many focusing on survey design because survey design, even in the 1960s, was a relatively new development. I think Hansen, Hurwitz, and Madow published the first text on the subject. Survey design was an emerging field. Today, we have quite a bit of expertise in the Census Bureau, government, and in private industry.

**Pemberton: Actually you raised an issue that I don't believe I've ever seen anything on, which is the Census Bureau's roll in establishing courses or writing text books on survey sampling. The agency needed people with that background. If people did not have that background, the alternative was to hire people with a mathematical background and train them.**

**Jones:** Joe Waksberg might be able to give you some insight on that. There were, as I recall, only two places in town offering courses on sampling—the U.S. Department of Agriculture's Graduate School and Catholic University. I think the Census Bureau was more interested in seeing that its people got training and was

less interested in developing academic courses. The U.S. Department of Agriculture was government-sponsored. It taught sampling and a lot of other technical courses. Since then, there have been attempts to develop expertise. The Bureau and the University of Maryland were trying to develop a curriculum for methodology. This was a cooperative venture. The University of Maryland saw a need, they set up a program, and the agencies cooperate by having their people attend the course.

**Pemberton:** **When you became chief of the Survey Design Branch in 1968, how did the work change?**

**Jones:** From GS-7 to GS-12, I was just a technician—designing and conducting surveys and writing reports. When I became a GS-13, I had a couple of people assigned to me. It was probably one of the best jobs I had. I had just enough staff to get the work done, but not enough to be overwhelmed. When I became the branch chief, I tried to stay involved with the actual work of the branch, but I had a lot more planning, recruiting, budgeting, and reporting responsibilities.

**Pemberton:** **Did Mr. Steinberg encourage his branch chiefs to get involved in budgeting activities, or was it on an “as needed” basis?**

**Jones:** Mr. Steinberg was only there one year while I was there. I was only a GS-7 so I really don't know. The money that the division got for doing its work and carrying out its research largely came from sponsors of the various surveys we conducted and as research funds that came from other areas within the Census Bureau. We were really getting funds from internal activities. I think that the methods test was the only exception to that. I think it was the only test that was funded as a line item giving a few hundred thousand dollars to try out different methods. Primarily, we were working off appropriation and research funds that were available to the methodology area.

**Pemberton:** **One of the things that our interview with Dan [Daniel L.] Levine [Deputy Director of the Census Bureau] brought out was that he was a very good going salesman when it came to getting surveys into the Bureau beginning in the late 1950s. Success meant the Surveys Division would grow and there would be some spin-off funding for other parts of the agency that, for example, might be experiencing downtime. He said that the Decennial Survey Division funded other things. I suspect that the Statistical Methods Division, at least in part, would have been one of them. Do you know if that was the case?**

**Jones:** The Decennial Survey Division was the big funding group. Almost all of the Statistical Methods Division's money came from the Decennial Survey Division. Of course, we also did all the work for them.

**Pemberton:** You shifted from survey design to response variance about 1968. You went from chief of one branch to chief of another. How did the substance of your work change and how did the second branch compare to the first? Did you feel comfortable going in?

**Jones:** The Responses Variance Studies Branch had more to do with the actual content of the questionnaire. The Survey Design Branch was interested in coverage, operations, and design. I moved from one branch to the other because the Census Bureau asked me to. Branches had not been producing results at the preferred rate, so they asked me to take that on and I did.

**Pemberton:** Did you find the kinds of questions that were being investigated interesting?

**Jones:** Yes, we had quite a bit of research and a lot of work and analysis. There was one other aspect of the work in that branch that was really kind of interesting—that had to do with what’s called rotation group bias. If you look at the Current Population Survey, it has eight different panels. Depending on how long each panel has been in the sample, you get different responses. We did a lot of research on that and we only found one thing that could actually have some effect on response. When the Current Population Survey interviews are conducted, there is a basic set of questions and a supplemental battery of detailed questions that are in two panels. The supplementary questions were about people who were not in the labor force. We found that after the interviewers went through the first set of basic questions and came to the detailed questions, some answers suggested that earlier answers were wrong. The interviewers would go back and change them. As a result, the unemployment rate in that panel would go up when compared to the other panel that didn’t have that supplemental bank of questions. After changing the panels, the first and fifth month went back down closer to the average and the fourth and the eighth month went up closer to the average. The only problem was that we introduced this modification when there was a very critical change going on in the labor force. For a few months we couldn’t tell how much of the change was due to changes in the labor force or changes in the survey’s design.

**Pemberton:** What sort of work did the Response Variance Studies Branch do for the 1970 census?

**Jones:** We designed and conducted the content reinterview study which told us about response quality in the 1970 census. This was a large-scale survey that provided new data from questions asking respondents to indicate their “mother tongue” and “vocational training.” Questions like “mother tongue” asked, “Did anyone in your household speak any language other than English?” We just asked the people what they thought. A big part of our effort there was to try to figure out,

what the people were thinking when they reported “yes” or “no” to that question. As a result of the question on vocational training, we found a major editing problem in the census. As I recall, if you didn’t answer the question, we always imputed “yes.” It greatly inflated the number of people reporting to have had vocational training.

**Pemberton:** **I think 1970 was the first time in recent years that we also asked the “Hispanic-origin” question.**

**Jones:** We tried to find out how far back respondents were reporting Hispanic origin. There was no specific agenda for those questions. We let the answers tell us what the people thought they had in mind when they answered them. These reports give a lot of information on what people had in mind when they said, “Yes, I am of Hispanic origin.”

**Pemberton:** **Were you also involved in question wording or did you wait until the data came back?**

**Jones:** By the time I got involved in the Response Variance Branch in 1968, the questions for the 1970 census had already been worded. The results from the 1970 census did have a big impact on the questions and wording in the 1980 census.

**Pemberton:** **In the mid-1970s was there a Bureau within the Bureau called the Center for Statistical Methods Research where anthropologist, sociologists, statisticians, and topographers were working on experiments dealing with question wording, order, and the effects of these changes on response?**

**Jones:** No, I think that came later. There was a center for survey search measurement.

**Pemberton:** **Was their work similar or related?**

**Jones:** They did related work. For example, Barbara [A.] Bailar [Associate Director for Statistical Standards and Methodology] was in that group. She did a lot of work on rotation group bias and its effect on the Current Population Survey data.

**Pemberton:** **How did it come about? I suspect that an opening came about for the Assistant Division Chief for Methods and Development in Statistical Methods Division. Do you know the circumstances leading to your selection as assistant division chief? Who were you competing against and, who was the decision maker at that point?**

**Jones:** First of all, there were only two branches under that assistant division chief. I had been chief of both. I think that gave qualified me. I think Joe Waksberg

appointed me to that position. I don't know who the other competitors were, but I knew being chief of both those branches placed me in the running.

**Pemberton:** **Can you describe some of the differences in management you encountered when promoted from branch to division chief?**

**Jones:** The higher up you go, the more administrative, planning, and policy making activities you get into. Of course, the assistant division chief helped us implement what we wanted to carry out.

**Pemberton:** **At this time, did you begin interacting with the Bureau of Labor Statistics or other agencies that were sponsoring surveys?**

**Jones:** Some interaction took place in the branches. There was more interaction at the assistant division chief's level.

**Pemberton:** **Were there new surveys during the 1970s that stand out as posing any particular kinds of challenges?**

**Jones:** During the early part of my career when I was down in the lower grades, we had some very substantial people at the Census Bureau—Morris Hansen, Bill Hurwitz, Joe [Joseph F.] Daly [Associate Director for Research and Development] and Joe Waksberg. They called them the “class of 1940 or 1950.” I was able to work with these people. Not at some great arms-length with a memo coming down through the chain; I actually attended meetings and heard how they thought and heard the arguments. We had some really good arguments. I remember the staff meetings we had with Bill Hurwitz every Wednesday morning. The senior methodology people around the Bureau would get together with the top staff in Survey Research Division and Morris Hansen. There was usually a presentation or a discussion or planning or whatever—mostly presentations. One of the things I recall was that you had to be prepared when you walked into that room. You didn't bring any “soft stuff” in a basket. If you got five minutes into a meeting and you were there delivering “bull” they would stop it and say, “This is all bull!” It was pretty pointed. At the same time, you had a lot of support. The methodology area, even though its staff were distributed throughout all these operating divisions, was kind of acting as one. They felt a commonness of purpose for the programs they were working on. They could be rough but I don't think anybody felt they were being personal about it. I think they felt it was a professional give-and-take. People didn't feel threatened by it; they felt they were trying to use their time as efficiently as they could.

**Pemberton:** **I understood that Bill Hurwitz could be kind of a gruff fellow; not necessarily in a negative kind of way, that was just his manner. You learned the lesson that you present to him a good case or you might as well not have any.**

**Jones:** Yes; I think that's reasonable in a business environment. One thing that is not widely known about Bill Hurwitz is that when you get into a personal situation, he is probably one of the most sympathetic and caring individuals you could want to meet. People have told me that they have had problems and gone to Bill. He sat down with them and couldn't be kinder to them when trying to help them solve their problem. He would go out of his way to try to get personally involved to do something for them. But when it came to business, he was all business and he was good at it. I worked for Joe Waksberg for about 10 years, beginning in 1963. Joe taught me more about statistics and survey work, how to operate, how to be straight with people, how to operate above board, and how to be a man. I can remember some of the early drafts of papers I would write. I would send a copy to him and Walter [M.] Perkins [Chief, Survey Design Branch] to review. When they sent it back, everything on there would be changed except my name. But I learned how to write these statistical reports under those guys because they made you see what they were getting at and they made you get right up front with the main findings.

**Pemberton:** **That was awfully good training.**

**Jones:** Yes; it was excellent. It is hard to get a good editor who's also a technician. Of all the bosses I had, and I had excellent bosses throughout my career, I treasure those ten years with Joe Waksberg.

**Pemberton:** **During the interview with Dan Levine, he mentioned that Joe Waksberg was able to extract the best possible data with the amount of money budgeted. He was able to do the best work with limited resources.**

**Jones:** I thought he was excellent at that.

**Pemberton:** **Joe Waksberg understood that he would never have all the resources—he prioritized and pick those most needed.**

**Jones:** We were always short on money. You never had the money to do the research you wanted, so Joe Waksberg would embed the experiment into the ongoing survey. He would get the experiment carried out with marginal additional cost. For example, in the Survey of Alterations and Repairs, he managed to embed in the ongoing survey the experiments to measure reporting biases. What was interesting was that he found ways to work that, for a small price, got the results out and eventually had a big impact on data quality. The results helped improve the quality of the data by showing what kind of a battery interview you needed. He did this on several occasions. I always thought that was one of his most outstanding characteristic—his ability to bill an experiment into an ongoing operation and get results at a marginal additional cost. He was the best I have

ever seen at that.

**Pemberton:** **It seems that there is a tradition at the Census Bureau of having a lot of research embedded in ongoing surveys.**

**Jones:** Yes. As far as new surveys, we got the crown and the consumer expenditure surveys. I think that was in the late 1960s or early 1970s. One of the things we went through was the expansion of the Current Population Survey from a national sample, to a state sample, to sub-state areas. It seemed like every two or three months the Bureau of Labor Statistics would come out and ask us to “scope out” a new design to meet certain pragmatic needs. We spent an awful lot of time working on that and we actually implemented some of it at times. That’s when the Comprehensive Employment and Training Act<sup>4</sup> was giving a lot of money back to state and local areas based on the Current Population Survey or the unemployment rate.

**Pemberton:** **This would have been the increase from 220 to 300--virtually 50 percent in the number of Primary Sampling Units?**

**Jones:** No; that took place earlier. This was when you started having separate designs for each state and in some cases we even did Metropolitan Statistical Areas. So there is some getting down to local market areas. I forgot the exact timing of that but it was when Danny Levine was associate director and after Joe Waksberg left. I guess that was between 1970 and 1980.

**Pemberton:** **Between 1973 and 1978, you were assistant division chief. Who was the division chief at that point?**

**Jones:** It was Morty [Morton] Boisen [Chief, Statistical Methods Division]. Morty Boisen was getting ready to retire, so I called Danny Levine and asked him if I could take that job. Danny Levine was the guy who hired me.

**Pemberton:** **How was Morty Boisen to work with?**

**Jones:** I thought Morty was excellent to work with—you didn’t want to work against him. He was a unique individual. He was more an operational and fiscal expert than a survey design expert. He understood methodology and he supported the division. While working under Joe Waksberg, he was instrumental in making sure the division had the resources it needed to carry out its work. When he became chief, he depended on his assistant chiefs to handle the technical details. He was more involved in the policy, budget, and strategic level. He was good to work for. I enjoyed him. Some of my best stories are about Morty. For example,

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<sup>4</sup> Public Law 93-203 signed December 28, 1973.

Morty was thinking about buying a new car in 1972. He went out and test drove cars and was trying to figure out what to do. He called me in one day and said, "I've been thinking about buying a car. Here's this Buick and I really like it, but it only gets 12 miles per gallon and this other car gets 18 miles per gallon. I don't like it as well but with the gas prices going up..." We started to figure how many miles he drove a year. Turns out he could get the Buick for just a few hundred dollars more a year. So he said, "By-golly, for \$200; that's nothing." He went and bought the Buick. Of course in 1973, with the oil embargo, the gas prices went up. Morty came and said, "You know I don't think I will ever ask you for advice again!"

When Morty was chief, Danny Levine would ask him how long it would take to design and implement a sample and how much would it cost. Morty would say, "It will take eight months and cost 'X' dollars." After I became chief, Morty came back to the Bureau during his retirement. Morty came to one meetings on a sample that we were designing and he asked, "How long will it take you to design that sample and implement it?" I said, "It would be eight months." He asked, "What takes you guys so long?" He got a chuckle out of it too.

**Pemberton:** **What were the most notable aspects of your tenure as chief of the Statistical Methods Division? It probably was implementing the Survey of Income and Program Participation.**

**Jones:** The Survey of Income and Program Participation, the redesign of the samples following the 1980 census, the pretest leading up to the design of the 1980 census, turning out evaluation and resource programs, estimating undercoverage, the Post-Enumeration Survey, and all the program support were notable.

**Pemberton:** **After you became division chief, were there any particular policy recommendations you made that stand out in your mind during that 10- or 11-year period?**

**Jones:** I don't want to claim that I personally made certain decisions but I was certainly involved in a number of them. For example, leading up to the 1990 census, a bunch of us came up with this idea of how to handle the undercount in the 1990 census using the so called "dual strategy." The "dual strategy" called for the Bureau to take the best census we could while at the same time carrying out the work that would put us in a position to adjust should that be necessary. Of course, I was involved back in the 1980 census with the process leading up to the decision not to adjust. I also was involved in the lawsuits and litigation following the decision not to adjust the 1980 census. I don't think you can point out, except in rare cases, where one person made a decision. Often a group of people researched various aspects of things and decided, as a group, that this is the thing to do. I remember back when we were going to do the mail census in 1970—there was a

lot of controversy then about how far to go. There were some in the Census Bureau who wanted to only do the big cities while others wanted to do everything. People really took different views of that and brought research data into the decision makers. I assumed that the director or somebody made that decision at some point. The strength of the Census Bureau is that it doesn't have just one point of view. It does have alternative points of view. I found that you are allowed to push your point of view as far as you want until the decision is made. After the decision is made, you are expected to get behind and "push the car." I believe that was one of the strengths of the Census Bureau—people with alternative views and the ability to express them. As a result, I think we had a better product overall.

**Pemberton:** **What a choice of words! I believe that's the standards for the administrative procedures act. I think Mr. [Vincent P.] Barabba [Director of the Census Bureau] was able to show that it was not an arbitrary choice, but a reasonable choice based on an evaluation of the information. It was a little bit more difficult at the time of the 1990s census.**

**Jones:** The 1980 census undercount looked like four-tenths of 1 percent. Now it wasn't but that's what it looks like. Okay, four-tenths of 1 percent, or six-tenths, or whatever it was, is not something that anybody would argue about because you have procedures that you can correct that. I think there are several factors involved: (1) what is the quality or true undercount? (2) what is the quality of the vehicle you have to adjust? And (3) what is the political environment? One of the things Vincent Barabba did when he made his decision was to have everybody in the room that was in the Census Bureau who had any say in this. He challenged them to argue with him about his decision. Nobody argued with him. So, I think his process was excellent. He knew of all these different views and he made sure that all got involved in the process and in the final decision making.

**Pemberton:** **One of the controversies, according to some of the research following the 1980's census, was that there was an overcount of some parts of the population. The Population Division's estimates suggested that the 1980 population ought to be around 219 or 220 million. The figures from the 1980 census tallied the population at 226.4 million. The overcount in 1980 had a particularly unfortunate effect—it carried over into the 1990 census, making the undercount look bigger than it was because the base was from 1980. Do you remember any of this?**

**Jones:** Oh sure, we overcounted people in 1980 and we overcounted in 1990. I just think in 1990 we probably controlled it better because of the automation. We know that we missed a lot of people in 1980. Let's face it, you are not going to count everybody in the census and you're not going to get them in the Post-Enumeration Survey either. There are people who do not want to be counted and you are not

going to count them. If a person reports there are three people in their household, but there are really four, you are still going to count three people. There is nothing in the world you are going to do about it. Now, maybe in the Post-Enumeration Survey you can go back and find it, if it was just kind of an accidental omission.

Let's talk about the kinds of people that are left out of the census. There are people running from law enforcement. They don't want anybody to know where they are. You have people who are afraid of losing housing subsidies. In some states there is a rule stating that a person getting a housing subsidy loses, or receives a reduced subsidy when their child turns 18 years-old. What's a mother going to do—kick the kid out? I don't think so! She is not going to report them to the welfare people and probably not to the Census Bureau. There also are people involved in illegal activities such as drugs, numbers running, bartering, and those not reporting to the Internal Revenue Service.

There are all kinds of reasons why people do not want to be counted and if you don't want to be counted you don't have to be counted. It's kind of like the Internal Revenue Service, it's almost a voluntary thing. Although the Census Bureau and the Internal Revenue Service have laws requiring people to report, there is still an awful lot of people who don't. You can't get them in a reinterview. That is part of the problem you have trying to adjust for the undercount. Now there are other people who will argue that some people want to be in the census, for example, the illegal aliens who want to send their kids to school. They want to look like normal taxpaying citizens. I suspect there is some of that, but I have firsthand knowledge that some illegal aliens don't want people to know where they are. What was the question that started us down this road?

**Pemberton:** I think it had to do with the issue of the overcount.

**Jones:** The true numbers of undercount are not defined. A measurement process is not consistent. Let's say an enumerator goes out three times to a household and can't get anybody to answer. The enumerator goes next door and the neighbor says there are three people living there—a man, a woman, and a child. They are white and approximate age is “this, that, and the other.” Well, we compute some characteristics and we count three people. The Post-Enumeration Survey comes along and the household is interviewed. The enumerators get three names, but these names don't show up in the census records. They are counted as “missed” in the Post-Enumeration Survey and are counted as “overcounted” in the census. If you just take a raw estimate of those missed, it could be any number. It could be a pretty big number but [in the above example] you have zero people. You actually have three people counted, there are three people there, but you have six errors.

**Pemberton:** **The General Accounting Office accused us of astronomical figures.**

**Jones:** Well they have to eat too. The problem I had with the General Accounting Office's numbers was that they were comparing 1980 and 1990 and the two aren't comparable. The procedures used on the 1980 and 1990 Post-Enumeration Survey were different. We didn't make 25 million errors in the 1990 census. There are overcounts and undercounts and there always will be.

**Pemberton:** **There must be some approach that the Bureau could take to explain to skeptical to people why there cannot be a perfect census. You began to explain some of that but it seems to me that it is a continuing problem that the Bureau must face.**

**Jones:** Well, the Census Bureau thinks it has an answer to that—do the adjustment before you publish the counts and just put out one number. That's the plan for Census 2000 as I understand it. So all that stuff will get hidden because the decision is made that there is just going to be one number.

**Pemberton:** **In 1986 or 1987, the decision was made by Jack [John] Keane [Director of the Census Bureau]] and I suspect his deputy, Mr. [Charles Louis] Kincannon [Deputy Director] that we need to have an associate director for the decennial census. Because it was a senior level rearrangement of the Bureau it had to go to the Department of Commerce to be approved prior to implementation. Parts of this rearrangement could have been informally implemented. I suspect one of the problems is that informal implementation still requires someone to sign-off on things. Following the reorganization, you were appointed associate director for the decennial census and held that position for approximately seven years. It must have been seven long, but exciting years. What do you know about how you were selected for the position?**

**Jones:** In late 1986, I knew I was being considered for that job. In fact, when we went to the Department of Commerce to talk to them about the reorganization, one of the things they proposed was that I should serve the Statistical Methods Division both as the chief for the demographic programs as well as provide the same kind of service for the new associate director. I said I didn't think that was feasible because I was already reporting to Dan Levine and Barbara Bailor. If we now had another associate director, I would be reporting to three people. Actually, that's kind of an envious position—you can get into a lot of mischief. But I thought that it was not a good idea, so I recommended they put up a separate division under this associate director to handle the fiscal issues and they bought it. I didn't know who was going to be the associate director. I used to go talk to Ted [Theodore G.] Clemence [Chief, Office of Program and Policy Development]—I'm not sure he knew anything for a fact but he had all the interesting rumors. Ted was a good

man. So it was just before Christmas, Louis Kincannon called me in and asked if I would be interested in taking the new associate director's job. I asked for a week to think about it. I told him I would be willing to give it a try if he thought I could do the job. I went for my interview with Jack Keane and they offered me the job but asked me not to say anything until they got it approved downtown. It could have been embarrassing if it were announced and the Department of Commerce rejected the organization. I liked to talk to Ted. Every week he had a different rumor. He would say, "I'll bet its going to be so-in-so." Finally, I said, "Well Ted, I take that bet. I'll bet that's *not* who it is going to be." By March, the rumors were flying. I kept the secret a long time. One day I went to Louis and said, "This is getting old. People are starting to ask me direct questions and I don't want to lie to people." He said, "Go ahead." So Ted came around to pay me for the bet we made, but I had to tell him, "No, I can't do that." It was great fun.

**Pemberton:** **He was a good storyteller and listener.**

**Jones:** Yes he was! He was a good guy to go and talk to about anything. He helped me immensely with a lot of things.

**Pemberton:** **How did he help you?**

**Jones:** I could talk to him. Ted was a big student of the way the federal statistical system ought to work and how bureaucrats and political appointees ought to interact. It was helpful to be able to talk to him about those sorts of things. He had a broader sense of outside perspective than I think some of us did. I think that helped. He had done some work on the Office of Management and Budget's paper on statistical reorganization, so I think he had a good sense of how this whole thing ought to work and how we as bureaucrats ought to work in it.

**Pemberton:** **Was your accession to the position to associate director the first time you began having regular interaction with political appointees other than those within the Bureau? Or had you already been doing that on a regular basis as division chief?**

**Jones:** As division chief, I had infrequent interaction with political appointees. Only on specific problems would Danny Levine ask me to go down and talk to them. Sometimes I would review a paper for them or things of that nature, but the interaction was very sporadic. As associate it became more frequent of course. I had a lot of involvement with the people at the Department of Commerce and the Office of Management and Budget.

**Pemberton:** **So, you also were briefing congressional staff or congresspeople if they asked?**

**Jones:** Yes, but we spread these briefings around among other members of the executive staff.

**Pemberton:** **Did the Department of Commerce normally like to send someone along with you? In other words, the Department of Commerce is our boss and we report to it. It has a larger interest than the Census Bureau and would have wanted to be aware of what the Census Bureau is doing.**

**Jones:** They insisted on it. You could hardly go up on the “Hill”<sup>5</sup> without asking one of them to come along. Part of it was budget, but a part of it was policy. We are nothing to the department except in those years ending in “0.” Then we are a big deal.

**Pemberton:** **In 1987, the bulk of the 1990 census planning had been done. The dress rehearsal was still to come. The first lawsuits also came in 1988. During the decade of the 1980s, as chief of the Statistical Methods Division, you would have been interacting with Barbara Bailor, who was researching how to deal with the undercount. Much of her career was spent on undercount research and resolution. You and she had opposing views on this issue. You believed it would be difficult to estimate the size or characteristics of those people missed by the Post-Enumeration Survey or the decennial census. What kind of discussions went on? What was the position of the other side? Your position was that some of the undercount could be estimated, but there would be a piece of it that could not be estimated. Was there a counter argument?**

**Jones:** The design of the 1990 Post-Enumeration Survey was based on the fundamental assumption that it would be conducted independently of the census. Therefore, it did not have to be better, it only had to be independent. The model that you use to estimate makes that assumption. It is recognized that you can't be perfect but if people have a nonzero probability of being in each and that probability is pretty substantial, then the independents will let you make the estimate. There is one problem with that assumption—everybody has a nonzero probability. Therefore, the people with a zero probability of being in either one are not going to be in either one. The other problem is that to carry out the Post-Enumeration Survey, you also make mistakes. The researchers found that about one-half of the errors estimated as undercount were actually due to errors in the Post-Enumeration Survey, not errors in the decennial census. If you made the correction using that, you would be correcting for errors in the Post-Enumeration Survey in addition to the errors you corrected for in the decennial census. I felt there were not enough data on how to make the adjustment. The underlying assumption of the independents doesn't hold because I don't know how big this group of people is

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<sup>5</sup> Capitol Hill

that have essentially zero probability of being included, but it is not minuscule. The undercount is not very big either, so how big does it have to be? My concern over that position was that the Post-Enumeration Survey was introducing as many errors as it was taking out. Coupled with the other concerns I had, I just didn't think we should do it.

**Pemberton:** **The design called for the Post-Enumeration Survey to include about 162,000 households. I believe around 1987, the original design called for the Post-Enumeration Survey to have around 300,000. Over time, without very much documentation, that number was almost cut in half.**

**Jones:** I think your memory is faulty there. The original design was 150,000. We were getting ready to go in with full-cycle estimates and we wanted a proposal to increase the design to 300,000 to increase the liability. I think that even came up in a law suit in 1988. The design all along had been 150,000, however, the proposal was to make it 300,000. The 1988 budget was the first budget that we had given a full-cycle cost estimate of \$2.6 billion. Up until then, we had been talking about \$1.8 billion. Actually we gave them three estimates and they chose the \$2.6 billion for the full-cycle. The justification for 300,000 was that it may have been able to reduce the variance on the estimates. I had concerns with that. That was going to increase the cost of Post-Enumeration Survey and add to the full-cycle estimate. I felt a survey of 300,000 could not be accomplished as well as a survey of 150,000. The errors that you make with 300,000 would mean you would have to dig deeper to get people to conduct it—there would be more matching to do. You just have a lot more clerical and field work to do and I felt that you introduced a lot of biases. The 300,000 was never a part of the official plan. The 150,000 plan was the choice all along. When we went in for the full-cycle estimate and the Post-Enumeration Survey people felt it was a success, they wanted to raise it to 300,000. I understand that 600,000 is even better, but it's not necessarily so. You have to worry about reducing variance, the nonsampling error, the matching error, the interview error, and the noninterview error. That is one thing that worries me about Census 2000 with 750,000 households.

**Pemberton:** **That's okay we still have a deadline of December 31, 2000, so we still have time.**

**Jones:** You make the time, but the question is—what are you going to do with the quality? How big are the errors in the Post Enumeration Survey going to be this time? I thought the research prior to the 1990 census did a good job documenting, researching, and describing how good that error was.

**Pemberton:** **In 1988, we began the actual implementation of the 1990 census rather than the planning stages. From address listings and the dress rehearsal, to the end of your tenure, you were “living, breathing, and sleeping” decennial census.**

**What were the most significant things about the way the 1990 census was conducted from your point of view? What were the most important differences and similarities between the 1990 and previous censuses?**

**Jones:** One of the first things I did when I came in was to put the full-cycle estimate in. I don't know whether that had been done. I guess it had been done in the 1980 census, but the increase from \$1.8 billion to \$2.6 billion was kind of a shock. We had a lot of explaining to do. But all along we said we were "scoping out" and trying to do a better census and it was the first time we had ever done a full-cycle estimate. The other \$1.8 billion had just been an in-place estimate. The second thing we did was to make a decision to go Digital Equipment Corporation computers in 1987. At that time, we thought that we were already late getting in our bid. The third thing—we wrote a document with ten major decisions on how the 1990 census would be conducted. That document went all the way up to the Department of Commerce and the Office of Management and Budget. I don't know whether it went to the Congress or not. This was the blueprint for how the 1990 census was going to be carried out. We did all the mandatory things, like giving the Congress the questions and the subjects in 1988 to get the questionnaire done. The Office and Management and Budget had a small problem with the questionnaire sample in 1988 that was kind of interesting. They made us conduct the dress rehearsal with the abbreviated questionnaires. Then when the problem finally was resolved we went back to the longer set of questions. That caused a few problems because we had been programming all of our stuff from the abbreviated dress rehearsal questionnaire.

**Pemberton:** **Essentially, the Office of Management and Budget refused to allow the printing of short- and long-form questionnaires for the dress rehearsal. They came back to us and said, "Wait a minute! Justify the long form."**

**Jones:** They said we were asking for a 16 million sample for the long-form and they wanted a 10 million sample. They also wanted some questions removed. We finally compromised with an 18 million sample. It was interesting how that happened. We showed that the average burden in the sample was not any greater than it was in 1980. I thought the 1990 census was an excellent census because we had planned it well. We decided what we were going to do, we "dress rehearsed" it, and we did the things the way the technicians thought best. We didn't try to push any arbitrary decisions, like deciding what questionnaires to include and exclude in questionable cases based on research. So I think all the people working on the census felt the 1990 census was an excellent census—some told me they thought it was the best census we had ever taken. The fact is, the director and others have told me that the 1990 census was an operational success but a public relations failure. There is a lot to be said about that and I blame that on the Department of Commerce and the lawyers—the lawyers especially. When we were sued in 1988 they said, "Keep your mouth shut, you don't need to go out

and tell people stuff.” Every time the newspapers would write a story and ask for our side we said, “No comment.” All the mayors, all the congressmen, and anybody with an ax to grind were getting the headlines. I’ve talked to some of these reporters and they told me that they know there was another side to this, but if we don’t tell it, they can’t print it. Their editors won’t let them print out the other side if someone doesn’t give it to them. They have to have verifiable things.

**Pemberton: I hadn’t realized the lawyers defending against the law suits were restricting senior Bureau officials from responding to charges leveled.**

**Jones:** Let me give you a concrete example—when we had the local review, we had these cities getting headlines in the papers because we missed this building with five hundred apartments, one hundred apartments, whole blocks, etc. So what we did was identify eleven people at the Bureau, starting with the Director and the Associate Directors. We sent them out to the eleven cities we picked where the difference from what they reported and what we had picked was pretty large. They took the address registers and the address list that the mayors had given us and they went out on the ground and looked at some of these. Now they didn’t look at more than a hundred or so people because they only had a couple of days to do it. They came back and reported that the problem was in the mayors’ lists. The Census Bureau’s lists were fine. All we missed were a few units here and there. We had errors, but these people were in the census. We were going to go out and have a press conference to say, “We looked into the charges in these eleven cities and folks it ain’t there.” We had the evidence case by case. Of course, we couldn’t give case by case data because of Title 13. The Department of Commerce never let us go out and have the press conference. Here they are beating on us and were sitting there saying, “Hit me, hit me, hit me.” We couldn’t refute things we knew were wrong.

**Pemberton: That’s a difficult situation to be in.**

**Jones:** If I had it to do over again, I don’t know what I would do. I had a perfect spokesperson—Pete [Peter A.] Bounpane [Assistant Director for Decennial Censuses]. He knows the census inside and out. He is honest, people understand him, and he can present it clearly. He could have done a great job. Barbara [Everitt] Bryant [Director of the Census Bureau] could have done a fantastic job of refuting some of those false statements. If we had gone out and refuted a few of them, the “bears” might have gotten smart and said, “Hmm, these guys, you know, are not a one way street. I don’t get free publicity out of this.” Nevertheless, of all the problems stemming from the 1990 census, the lawsuits had a chilling effect.

**Pemberton: That would have been both the Department of Justice lawyers and the Department of Commerce lawyers or primarily Justice?**

**Jones:** I don't know which one it is. It doesn't matter. This was the word that comes down. I have talked to users who think we had a good census. I have had people tell me that they think it's the best census we have ever done. I don't know how you evaluate the census, but I know a lot of people put a lot of time into the 1990 census and were discouraged by the reception it received that it got the reception it did. I don't know how much of it was the thing about the lawyers and the Department [of Commerce] sitting on us. There was the perception out there that the Department was "too deep in our knickers." I had a reporter tell me, "You know Charlie, if you all missed another two million people it wouldn't be as bad, that wouldn't help you to find those people as it would to get the Department out of your business." The perception out there was that the Department was calling all the shots. For some reason the Department of Commerce didn't have that much support. The Census Bureau has a fair amount of acceptance and is appreciated in the marketing because people deal with the Bureau all of the time and know that we try to be objective and do the best we can—even the press.

**Pemberton:** **Following the 1990 census, formal planning began for the 2000 Census. Were you splitting your time between the 1990 census and the Census 2000 planning, or were you more focused on completing the 1990 census?**

**Jones:** I was focused on completing the 1990 census, Bob [Robert M.] Groves [Associate Director for Statistical Design, Methodology, and Standards] took over the planning that initially. Susan Miskura [Chief, Year 2000 Research and Development Staff] went over to work for him because she had knowledge about census procedures and how to organize. She went over to be his right-hand person while she was in taking the 1990 census then she was going to be planning of the 2000. I tried to proceed to get the 1990 census done. It was starting to fall off then. I thought we did a pretty decent job in getting out stuff quickly and accurately.

**Pemberton:** **If you compare it to the time the material came out after the 1980 census I think yes indeed.**

**Jones:** Most of the people who had any involvement planning and conducting the 1990 census felt rather good about what they did and the effort they put out and the product they delivered where it counts. In other ways we are political, operational entity here and you have to deal with those people and the perception they have of us is not very good.

**Pemberton:** **I hope in the planning and implementation of the 2000 census you or others will give the Bureau and the Department of Commerce the opportunity to benefit by the comment you just made. It is virtually certain that there will be law suits in connection with the 2000 census. The danger is that the**

**response of the Department of Justice and Commerce may also be the same, in which case we will be in the same position.**

**Jones:** Well, I will be glad to sit down and talk with anybody that would like to talk to me about anything that has to do with the census. I don't think that if I was to try to give some people some advice they would accept it for about as much as it would cost them. If someone wanted to pick my brain, I would be glad to sit down and explain. Maybe someone will read this history, I don't know. I don't see how my being pro-active is going to help much in that way.

**Pemberton:** **When we get the phone calls around 1999 and 2000 from the reporters, we will have to send them to you.**

**Jones:** Well, I would just have to tell them what I know or what I believe. The Census Bureau has a tremendous staff. A lot of the good people at the Bureau came in through Statistical Methods Division. I know that I will be more likely recalled for what I did on the 1990 Census in terms of being the Associate Director. I think my tenure as Chief of Statistical Methods Division had an awful big impact on the Bureau, the Federal statistical system, survey design, and survey research. I am really proud of that era.

**Pemberton:** **I think a lot of us are proud of it, too. I want to thank you for taking the time to talk with us and to say that we appreciate it and your work at the Census Bureau.**

**Jones:** I was glad to do it. Thanks for having me in. I enjoyed it.